

<p>94-287573/36 A11 D16 (A96 D21) BIOC- 93.03.03 SOC BIOCHIMIE APPLIQUEE *FR 2702144-A1 93.03.03 93FR-002443 (94.09.09) A61K 7/00, C08B 37/08, C12P 19/04 Cosmetic use of chitosan degradation prods. - prepd. by enzymatic hydrolysis of partially acetylated chitosan using Thermoactinomyces enzyme C94-131095 Addnl. Data: PAUL F M B, MONSANTO P E F</p>	<p>A(3-A, 10-E5, 10-E9, 12-V4A, 12-V4C) D(8-B4, 8-B9, 8-B9A)</p>
<p>Cosmetic use of chitosan degradation prods. (I) is claimed, where (I) comprise oligosaccharides and polysaccharides with molecular wts. of 300,000 or less (by capillary viscometry) and are produced by enzymatic hydrolysis of partially acetylated chitosan using an enzyme prepd. by culturing a Thermoactinomyces strain. Also claimed are: (1) a process for producing chitosan degradation prods. of the above type; and (2) prods. obtained by the above process, comprising partially acetylated poly-D-glucosamine oligosaccharides with beta(1-4- linkages having a degree of polymerisation of up to 12 (pref. 2-10).</p>	<p><u>CLAIMED PROCESS</u> The process comprises: (1) swelling partially acetylated chitosan with water contg. an acid to give an aq. compsn. with a pH of up to 5.5 (pref. 3-5); (2) preheating the compsn. to 30-60 deg.C; (3) adding an enzyme (as above) while stirring; (4) incubating the mixt. at 30-60°C and a pH of up to 5.5 (pref. 3-5) for at least 1 hr; and (5) sepg. oligosaccharides that are soluble in water, alcohols and water/alcohol mixts. and/or polysaccharides that are insoluble in water (pH values above 6-6.5), alcohols and water-alcohol mixts. The enzyme is pref. produced by culturing Thermoactinomyces sp. I-1052. The chitosan pref. has a degree of acetylation of 75% or less (esp.35-50%) and a molecular wt. of at least 500,000. (AJM) (17pp367DwgNo.0/0)</p>
<p><u>USE</u> (I) may be used in skin creams, hair lotions, shampoos, etc.</p>	<p>FR 2702144-A</p>